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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,546

06/22/2007

Ryoichi Sasano

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EXAMINER

THERKORN, ERNEST G

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

03/23/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,546	<b>Applicant(s)</b> SASANO ET AL.	
	<b>Examiner</b> Ernest G. Therkorn	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-9 and 12-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-9, and 12-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-9, and 12-16 are rejected under 35 U.S.C. 103(a) as obvious over either Price (U.S. Patent No. 5,439,593) or Cook (U.S. Patent No. 6,761,885) in view of either Jaworek (U.S. Patent No. 3,763,879) or Vidalinc (U.S. Patent Publication No. 2006/0118471). At best, the claims differ from each of Price (U.S. Patent No. 5,439,593) and Cook (U.S. Patent No. 6,761,885) in reciting the surfaces are flush. Jaworek (U.S. Patent No. 3,763,879) (column 1, lines 29-36, column 2, lines 1-4 and 20-25, and column 6, lines 23-25) discloses that columns made from segments having substantially the same internal diameter allow the creation of columns having of any desired but precisely defined length. Vidalinc (U.S. Patent Publication No. 2006/0118471) (paragraph 41 and Figure 3) discloses that modules of the same cross-section allow the stationary phase to act as a monoblock and the mobile phase to have laminar flow. It would have been obvious to have flush surfaces in either Price (U.S. Patent No. 5,439,593) or Cook (U.S. Patent No. 6,761,885) either because Jaworek (U.S. Patent No. 3,763,879) (column 1, lines 29-36, column 2, lines 1-4 and 20-25, and column 6, lines 23-25) discloses that columns made from segments having substantially the same internal diameter allow the creation of columns having of any desired but precisely defined length or because Vidalinc (U.S. Patent Publication No.

2006/0118471) (paragraph 41 and Figure 3 ) discloses that modules of the same cross-section allow the stationary phase to act as a monoblock and the mobile phase to have laminar flow.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Price (U.S. Patent No. 5,439,593) or Cook (U.S. Patent No. 6,761,885) in view of either Jaworek (U.S. Patent No. 3,763,879) or Vidalinc (U.S. Patent Publication No. 2006/0118471) as applied to claims 1, 4-9, and 12-16 above, and further in view of either August (U.S. Patent No. 6,530,288) or Serenko (U.S. Patent No. 5,989,424). At best, the claims differ from either Price (U.S. Patent No. 5,439,593) or Cook (U.S. Patent No. 6,761,885) in reciting use of projections. August (U.S. Patent No. 6,530,288) (column 4, lines 30-44) discloses that use of projections support a frit and form channels. Serenko (U.S. Patent No. 5,989,424) (column 6, lines 16-44) discloses projections may be used to support a filter. It would have been obvious to use projections in either Price (U.S. Patent No. 5,439,593) or Cook (U.S. Patent No. 6,761,885) in view of either Jaworek (U.S. Patent No. 3,763,879) or Vidalinc (U.S. Patent Publication No. 2006/0118471) either because August (U.S. Patent No. 6,530,288) (column 4, lines 30-44) discloses that use of projections support a frit and form channels or because Serenko (U.S. Patent No. 5,989,424) (column 6, lines 16-44) discloses projections may be used to support a filter.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable either Price (U.S. Patent No. 5,439,593) or Cook (U.S. Patent No. 6,761,885) in view of either Jaworek (U.S. Patent No. 3,763,879) or Vidalinc (U.S. Patent Publication No.

2006/0118471) and either August (U.S. Patent No. 6,530,288) or Serenko (U.S. Patent No. 5,989,424) as applied to claims 5 and 6 above, and further in view of each of Muller (U.S. Patent No. 4,732,687) and Radnoti (U.S. Patent No. 4,055,498). At best, the claim differs from either Price (U.S. Patent No. 5,439,593) or Cook (U.S. Patent No. 6,761,885) in view of either Jaworek (U.S. Patent No. 3,763,879) or Vidalinc (U.S. Patent Publication No. 2006/0118471) and either August (U.S. Patent No. 6,530,288) or Serenko (U.S. Patent No. 5,989,424) in reciting use of a removable portion. Muller (U.S. Patent No. 4,732,687) (column 3, line 62-column 4, line 5) discloses use of a screw connection allows exchanging the frit in a problem-free manner. Radnoti (U.S. Patent No. 4,055,498) (column 1, lines 25-35 and column 2, lines 16-25) discloses use of a screw cap allows replacement of a filter disc. It would have been obvious to have a removable portion in either Price (U.S. Patent No. 5,439,593) or Cook (U.S. Patent No. 6,761,885) in view of either Jaworek (U.S. Patent No. 3,763,879) or Vidalinc (U.S. Patent Publication No. 2006/0118471) and either August (U.S. Patent No. 6,530,288) or Serenko (U.S. Patent No. 5,989,424) either because Muller (U.S. Patent No. 4,732,687) (column 3, line 62-column 4, line 5) discloses use of a screw connection allows exchanging the frit in a problem-free manner or because Radnoti (U.S. Patent No. 4,055,498) (column 1, lines 25-35 and column 2, lines 16-25) discloses use of a screw cap allows replacement of a filter disc.

The remarks urge patentability over based upon having the surfaces are flush. However, Jaworek (U.S. Patent No. 3,763,879) (column 1, lines 29-36, column 2, lines 1-4 and 20-25, and column 6, lines 23-25) discloses that columns made from segments

having substantially the same internal diameter allows the creation of columns having of any desired but precisely defined length. Vidalinc (U.S. Patent Publication No. 2006/0118471) (paragraph 41 and Figure 3) discloses that modules of the same cross-section allow the stationary phase to act as a monoblock and the mobile phase to have laminar flow. As such, it would have been obvious to have flush surfaces in either Price (U.S. Patent No. 5,439,593) or Cook (U.S. Patent No. 6,761,885) either because Jaworek (U.S. Patent No. 3,763,879) (column 1, lines 29-36, column 2, lines 1-4 and 20-25, and column 6, lines 23-25) discloses that columns made from segments having substantially the same internal diameter allows the creation of columns having of any desired but precisely defined length or because Vidalinc (U.S. Patent Publication No. 2006/0118471) (paragraph 41 and Figure 3 ) discloses that modules of the same cross-section allow the stationary phase to act as a monoblock and the mobile phase to have laminar flow.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free).

/Ernest G. Therkorn/  
**Ernest G. Therkorn**  
**Primary Examiner**  
**Art Unit 1797**

EGT  
March 12, 2009